

## **REMARKS**

### **I. Status of Application**

Claims 1-22 and 25 are all of the claims currently pending in the present Application.

The Examiner has withdrawn claim 23 from consideration.

By this Amendment Applicant hereby editorially amend claims 1, 12 and 22 for purposes of clarity. By this Amendment Applicant also cancels claim 24.

Additionally, Applicant adds claim 25. Support for new claim 25 can be found at least in ¶¶ [0058]-[0059] of the present Application.

### **II. Claim Objections**

Claim 24 has been objected to by the Examiner. Applicant has canceled claim 24 and as such respectfully asserts that this objection is now moot.

### **III. Claim Rejections Under 35 U.S.C. § 101**

The Examiner has rejected claims 12 and 24 under 35 U.S.C. § 101 as allegedly not falling into one of the four statutory categories of invention. Specifically, the Examiner alleges that the “process” of claim 12 is not “tied to another statutory category (such as a particular apparatus), or (2) transforms[s] underlying subject matter (such as an article or material) to a different state or thing.” (See Office Action, page 3).

With respect to claim 12, Applicant respectfully disagrees. Claim 12 recites “[a] **method** of calibrating a transmission route **used by an array antenna transceiver** for performing wide-band transmission.” As such, claim 12 is sufficiently tied to another statutory category -- “an array antenna transceiver.” For at least this reason Applicant respectfully requests for this rejection to be withdrawn.

With respect to claim 24, this claim has been canceled and as such, this rejection is now moot.

**IV. Claim Rejections Under 35 U.S.C. § 112**

The Examiner has rejected claims 1-11 under 35 U.S.C. § 112, first paragraph, as being a single means claim. Applicants respectfully note that the Examiner's rejection is ambiguous. Specifically, in ¶ 6 of the Office Action, the Examiner rejects claim 1 as a single means claim. However, in ¶ 8 of the Office Action, the Examiner states: "[w]ith regard to claim 1, **Examiner holds "means for grouping" does not invoke 35 U.S.C. 112, sixth paragraph**, because the claim further provides a list of the structure underlying the means and the detailed recitation of the structure for performing the grouping function removes this element from the purview of 35 U.S.C. 112, sixth paragraph." (See Office Action, page 4). Applicant respectfully asserts that if claim 1 is not a "means" type claim under 35 U.S.C. 112, sixth paragraph, then this claim cannot be rejected as a "single means" claim.

Nevertheless, with respect to claim 1, and so as to advance prosecution of the present Application, claim 1 has been amended. As such, Applicant respectfully asserts that this rejection is now moot.

With respect to claims 2-11 the Examiner has not explained why these claims would amount to "single means" claims. Applicant respectfully asserts that claims 2-11 are allowable.

Claim 1 is also rejected by the Examiner under 35 U.S.C. § 112, second paragraph. Applicants respectfully assert that this rejection is improper. Specifically, the MPEP in section 2181 states that: "unless the means-plus-function language is itself unclear, a claim limitation written in means-plus-function language meets the definiteness requirement in 35 U.S.C. 112, second paragraph, **so long as the specification meets the written description requirement in**

**35 U.S.C. 112, first paragraph.**” The Examiner has not alleged that claim 1 is unsupported by the specification of the Application for purposes of written description under 35 U.S.C. § 112, first paragraph. Furthermore, “[t]here is **a strong presumption that an adequate written description of the claimed invention is present when the application is filed.**” (See MPEP § 2163-I-A; *see also In re Wertheim*, 541 F.2d 257, 263, 191 USPQ 90, 97 (CCPA 1976)). Applicant notes that written description support for claim 1 can be found at least in ¶¶ [0058]-[0061] of the present Application. For at least these reasons, Applicant respectfully requests for the Examiner to withdraw this rejection.

**V. Claim Rejections Under 35 U.S.C. § 102**

The Examiner has rejected claims 1, 12, and 24 under 35 U.S.C. § 102(e) as allegedly being anticipated by Farlow et al. (US 7,072,693). Applicant respectfully disagrees.

With respect to independent claim 1, Farlow fails to disclose, or even suggest at least a **“means for grouping all subcarriers into a plurality of subcarrier groups.”**

Instead, Farlow simply describes separating a signal into a plurality of spatial channels and then calibrating the signal for each individual spatial channel. In other words, when the device of Farlow wants to transmit a signal, and includes “M” spatial channels (paths), the signal will be sent along M spatial channels (paths): “[t]he wireless signal is simultaneously transmitted over M selected antennas from the set of antennas 233 through 238.” (See Col. 7, ll. 16-19). In accordance with Farlow, each spatial channel will have its own set of spatial weights (calibration coefficients). (See Col. 4, ll. 33-36; *see also* Col. 5, ll. 51-58). Thus, the signal sent along each spatial channel (path) will be calibrated differently for each path. Accordingly, the signal being sent along each path in Farlow is the same signal, but one that is calibrated differently for each spatial path.

Conversely, claim 1 requires “**grouping all subcarriers into a plurality of subcarrier groups**,” which is the opposite of sending the same signal along M differently calibrated paths. In fact, there is simply no disclosure of even the claimed “plurality of subcarriers,” nor is there any disclosure of “**grouping all subcarriers into a plurality of subcarrier groups**,” as required by claim 1. For at least this reason, claim 1 overcomes the cited art of record.

With regard to independent claim 12, Applicant respectfully asserts that this claim is allowable for reasons analogous to those recited with respect to claim 1 above.

With respect to claim 24, this claim has been canceled and as such Applicant respectfully asserts that the rejection is now moot.

#### **VI. Allowable Subject Matter**

The Examiner has indicated that claims 13-22 contain allowable subject matter, and would allowable if rewritten in independent form. The Examiner is respectfully requested to hold rewriting of the allowable claims in abeyance until the above remarks are considered.

With respect to claims 2-11, Applicant respectfully asserts that these claims contain subject matter analogous to that recited in allowable claims 13-22, and as such, these claims should also be found allowable. In fact, the Examiner has previously indicated that claims 2-11 contain allowable subject matter.

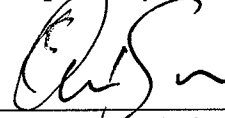
#### **VII. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

This Amendment is being filed via the USPTO Electronic Filing System (EFS).

Applicant herewith petitions the Director of the USPTO to extend the time for reply to the above-identified Office Action for an appropriate length of time if necessary. Any fee due under 37 U.S.C. § 1.17(a) is being paid via the USPTO Electronic Filing System (EFS). The USPTO is also directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Artem N. Sokolov  
Registration No. 61,325

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: February 2, 2009